



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,094	07/18/2001	Roberto Ponticelli	38146	7390

29569 7590 02/02/2005

JEFFREY FURR  
253 N. MAIN STREET  
JOHNSTOWN, OH 43031

EXAMINER
----------

AUVE, GLENN ALLEN

ART UNIT	PAPER NUMBER
----------	--------------

2111

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/682,094

**Applicant(s)**

PONTICELLI ET AL.

**Examiner**

Glenn A. Auve

**Art Unit**

2111

-- **Th MAILING DATE of this communication appears n the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 23-44 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant should note that the examiner in charge of this application has changed.

Contact information is contained at the end of this Office Action.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of processing means must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Applicant's correction to the drawings in response to the previous Office Action has been received and is approved by the examiner.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 23-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 is rejected based on lack of positive antecedent basis of "said remote device" on lines 2-3 because a plurality of remote devices were previously recited and it is not clear whether a particular one of the devices or all of the devices are being referred to; and "the processing means" on line 6 because a plurality of processing means were previously recited.

Claims 24-33 are rejected because they depend on claim 23.

In claim 25 "a IIC protocol" should be "an IIC protocol".

Claim 26 is rejected based on lack of positive antecedent basis of "the processing means" on lines 2-3.

Claim 27 is rejected based on lack of positive antecedent basis of "said remote device" on line 1.

Claim 28 is rejected based on lack of positive antecedent basis of "said remote device" on line 1.

Claim 29 is rejected based on lack of positive antecedent basis of "said remote device" on line 1.

Claim 30 is rejected based on lack of positive antecedent basis of "said remote device" on line 2.

Claim 33 is rejected based on lack of positive antecedent basis of "said the high impedance switch" on line 1.

Claim 33 is also rejected because it is not clear what is meant by "said the high impedance switch makes it possible to use of two networks of different speeds..." This phrase is not grammatically correct.

Claim 34 is rejected based on lack of positive antecedent basis of "said remote device" on line 3 because a plurality of remote devices were previously recited and it is not clear whether a particular one of the devices or all of the devices are being referred to; and "the processing means" on lines 5-6 because a plurality of processing means were previously recited. In line 6, "to" should probably be inserted between "address" and "all".

Claims 35-44 are rejected because they depend on claim 34.

In claim 36 "a IIC protocol" should be "an IIC protocol".

Claim 37 is rejected based on lack of positive antecedent basis of "the processing means" on lines 2-3.

Claim 38 is rejected because it is not clear what is meant by "which includes the step of connecting said remote device is connected to a peripheral device." If applicant intends to add a step to the already-recited process, then an introductory phrase such as "The process according to claim 34 further including the step of..." would be proper.

Claim 38 is rejected based on lack of positive antecedent basis of "said remote device" on lines 1-2.

Claim 39 is rejected based on lack of positive antecedent basis of "said remote device" on line 1.

Claim 41 is rejected based on lack of positive antecedent basis of "the remote device" on line 2.

Claim 42 is rejected because it is not clear what is meant by "which adds the step of amplifying the signal..." If applicant intends to add a step to the already-recited process, then an

Art Unit: 2111

introductory phrase such as "The process according to claim 34 further including the step of..." would be proper.

Claim 43 is rejected because it is not clear what is meant by "which includes the steps of having an extender is used to allow remote devices to be connected over the IIC bus." If applicant intends to add a step to the already-recited process, then an introductory phrase such as "The process according to claim 34 further including the step of..." would be proper. The phrasing is also not grammatically correct.

Claim 44 is rejected based on lack of positive antecedent basis of "said the high impedance switch" on line 1.

Claim 44 is also rejected because it is not clear what is meant by "said the high impedance switch makes it possible to use of two networks of different speeds..." This phrase is not grammatically correct.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 2111

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 23-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheikh et al., 6,266,721 (hereinafter Sheikh) in view of Ku et al., 6,438,624 (hereinafter Ku).

As to claims 23-44 → [23,34]: Sheikh discloses a device (note Figure 2, server 100) comprising a plurality of processing means (note Figure 2, CPU 164, controllers 166, 168, 170, 172, 174, 176, 178) connected to a buffer means (note Figure 3, switch 228 and microcontroller bus extender 230) which is connected to communication bus (note I2C bus of column 8, line 15 – column 11, line 6) which is connected to a plurality of remote devices (note Figure 3, microcontroller 200 and element 122), [24,35]: wherein the buffer means is an IIC buffer (note I2C bus of column 8, line 15 – column 11, line 6) with a high impedance disconnection circuit (note Figure 3, switch 228), [25,36]: wherein a IIC protocol is used (note column 8, line 15 – column 11, line 6), [26,37]: wherein the buffer means is an IIC buffer (note column 8, line 15 – column 11, line 6) and the buffer is connected by a high impedance disconnection circuit (note Figure 3, switch 228) to the processing means, and which said disconnection circuit will disconnect said IIC buffer based on a BUS\_En signal (note column 10, line 57 – column 11, line 6, wherein whatever signal is used to control the state of the switch reads on the claimed BUS\_En signal), [27,38]: wherein said remote device is connected to a peripheral device (note Figure 1, element 124), [28,39]: wherein said remote device is a microcontroller (note Figure 3, microcontroller 200), [29,40]: wherein said remote device (i.e., PIC16C65) is comprised of a microcontroller, RAM memory, ROM memory, a non-volatile memory, an IIC communication port with SCL and SDA lines, an I/O port for interconnection with a peripheral device, a relay

port with COM, NC and NO contacts, an ADC converter for analogical voltage readings, a timer WDT, a POWER conditioning system, and an information processing means (note PIC16C65 data sheets, which are being provided as evidence that PIC16C65 comprises the limitations claimed), [30,41]: wherein the communication bus is connected to the remote device through a high impedance disconnection means (note Figure 3, switch 228), [31,42]: wherein the buffer is a bi-directional IIC buffer which amplifies the signal on the communication bus (note column 10, line 67 – column 11, line 6 and evidence provided by Applicant's specification [0074], which recites the use of the same bus extender and describes it as being a bi-directional buffer which amplifies signals on the bus), [32,43]: where an extender is used to allow remote devices to be connected over the IIC bus (fig.2 and col. 8-9), [33,44]: wherein said the high impedance switch makes it possible to use two networks of different speeds connected to the same master (i.e., inherent in the fact that a high impedance switch is used – the presence/use of the high impedance switch results in the ability to use two networks of different speeds connected to the same master).

Sheikh fails to disclose that the remote device will have a default address when added to the communication bus, and said processing means issues a general config address command to a plurality of remote devices through the communication bus, which will put the remote devices into a wait status, and when the processing means issues a general command address to all the remote devices on the communication bus the remote devices will act as being addressed with their address [as recited in claims 23 and 34].

Ku discloses that a newly added device will have a default address when added to the communication bus; processing means issues a general config address command to a plurality



of newly added devices through the communication bus, which will put the devices into a wait status, and when the processing means issues a general command address to all the devices on the communication bus the devices will act as being addressed with their address (note column 2, lines 44-61 and column 5, lines 17-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention employ the use of an automatic address assignment of the I2C devices so as to eliminate the need for additional hardware or manual intervention, as Ku teaches at column 5, lines 37-39.

### ***Response to Arguments***

8. Applicant's arguments filed 19 November 2004 have been fully considered but they are not persuasive. Applicant has generally argued that there would be no reason to combine the references, however, in so doing applicant refers to Sheikh 6,189,109. The rejection is based on Sheikh 6,266,721. Furthermore, the general allegation that it would not be obvious to combine the reference lacks any specific argument or reasons why applicant believes this to be the case. The rejection includes reasons for combining the references. Applicant also makes the general statement that the new claims are novel and unique but does not explain why this is believed to be the case. Therefore applicant's comments are not persuasive.

9. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

10. Applicant also requested the examiner's assistance pursuant to MPEP §707.03(d). However there is no such section present in the MPEP's current revision. With regard to MPEP §707.07(j), this section merely seems to say that allowable subject matter should be indicated

Art Unit: 2111

as soon as possible, however, in this case it appears that the prior art applies to applicant's claims and no indication of allowable subject matter would be proper.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

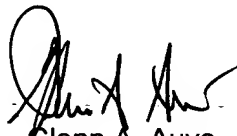
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (571) 272-3623. The examiner can normally be reached on M-F 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2111

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Glenn A. Auve", is positioned above the printed name.

Glenn A. Auve  
Primary Examiner  
Art Unit 2111

gaa  
January 31, 2005